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LIST OF SYMBOLS

Z_0	-	Characteristic Impedance
Z_L	-	Load Impedance
Z_{in}	-	Input Impedance
RL	-	Return Loss
S_{11}	-	S parameter from port 1 to port 1
λ	-	Wavelength
λg	-	Dielectric guided wavelength
λo	-	Free space wavelength
tan δ	-	Dielectric loss tangent
f	-	Frequency
f_r	-	Resonant Frequency
f_c	-	Cut off frequency
f_H	-	Upper frequency
f_L	-	Lower frequency
C	-	Speed of light 3×10^8 m/s
ϵ_{eff}	-	Effective dielectric constant
ϵ_0	-	Dielectric constant of free space
ϵ_r	-	Relative Dielectric constant / permittivity
W	-	Patch or conductor width
L	-	Patch or conductor length
T	-	Conductor thickness
h or t	-	Height of dielectric layer
V_0^+	-	Amplitude of incident wave
V_0^-	-	Amplitude of reflected wave
Γ	-	Reflection coefficient

L_{eff}	-	Effective length
ΔL	-	Length extension

LIST OF ABBREVIATIONS

CST	-	Computer Simulation Software
GPS	-	Global Positioning System
ACMA	-	Aperture Coupled Microstrip Antenna
FR4	-	Fire Retardant Type 4
BW	-	Bandwidth
BW%	-	Bandwidth percentage
CAD	-	Computer Aided Design
PCB	-	Printed Circuit Boards
dB	-	Decibel
GHz	-	Giga Hertz
MHz	-	Mega Hertz
L	-	Length
WLAN	-	Wireless Local Area Network
mm	-	Millimeter
R	-	Radius
RF	-	Radio Frequency
W	-	Width
Z_0	-	Characteristic Impedance
G	-	Gain
IEEE	-	Institute of Electrical and Electronic Engineers
ISM	-	Industrial Science Medical
MIC	-	Microwave Integrated Circuit
MMIC	-	Monolithic Microwave Integrated Circuit
VSWR	-	Voltage Standing Wave Ratio
RL	-	Return Loss

HPBW	-	Half Power Beam Width
EM	-	Electromagnetic
UV	-	Ultraviolet